Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT P. DOLAN,
THOMAS R. PHILLIPS, THOMAS L. DeWOLF,
and GRAHAM WRIGHT

Appeal No. 2000-1944
Application 08/738,157[1]

ON BRIEF

Before BARRETT, BARRY, and BLANKENSHIP, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 1-10 and 21-30.

[1] Application for patent filed October 25, 1996, entitled "HVAAC [sic] Network Verification System." It is noted that "HVAC" in the title is correct in Appellants' specification and declaration, but is misspelled as "HVAAC" on the file folder and in the PALM system which Appellants do not see. Appellants should request to have the term corrected before issue.

We reverse.

BACKGROUND

The invention relates to a method and apparatus for determining the operability of heating, ventilating, and air conditioning (HVAC) devices connected through a communication network to a network control device. Each HVAC device has a visible display, such as a panel of light emitting diodes (LEDs). The network control device sends a message to the HVAC devices to initiate a visible display. The message is received and processed to initiate a visible display which may be easily observed by a person to confirm that the HVAC device is responding to the message from the network control device.

Claim 1 is reproduced below.

> 1. A process for verifying the operability of at least one HVAC device in a communication network, said process comprising the steps of:
>
> sending a message from a network control device to the HVAC device, the message including information for prompting the HVAC device to initiate a visible display on the HVAC device if the message is successfully processed by the HVAC device;
>
> receiving, at the HVAC device, the message from the network control device and thereafter processing the information for prompting the HVAC device to initiate a visible display; and
>
> automatically initiating a visible display on the HVAC device when the message is received and processed by the HVAC device whereby the visible display may be easily

observed by a person wishing to check the physical location where the HVAC device has been installed.

The Examiner relies on the following references:

Froehling et al. (Froehling)	4,497,031	January 29, 1985
Dahl et al. (Dahl)	5,233,347	August 3, 1993

Claims 1-10 and 21-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Froehling and Dahl.

We refer to the final rejection (Paper No. 11) (pages referred to as "FR__") and the examiner's answer (Paper No. 15) (pages referred to as "EA__") for a statement of the Examiner's rejection, and to the appeal brief (Paper No. 14) (pages referred to as "Br__") for a statement of Appellants' arguments thereagainst.

OPINION

The contents of the references

The contents of Froehling and Dahl are fairly summarized by Appellants (Br4-6).

The rejection of the independent claims

The Examiner reads the "network control device" of claim 1 and the "control device" of claim 21 on the head end unit 14 in Froehling and reads the "HVAC devices" in claims 1 and 21 on the controllers 10 and any devices downstream therefrom. Thus, the Examiner finds that Froehling discloses a "network control device" or "control device" (head end unit 14) that sends "messages" (related to "demand load control," col. 10, lines 42-46) over a "communication network" (shown in figure 1)

to an "HVAC device" (controllers 10 and devices downstream therefrom). The Examiner admits that "Froehling does not specifically disclose the claimed network control device sending a message including information for prompting the HVAC device to initiate a visible display on the HVAC device if the message is successfully processed by the HVAC device" (FR3). However, the Examiner finds that Froehling discloses (at col. 10, lines 46-52) data processing units 16 used for checking and verifying information passing between the controllers 10 and the head end unit 14. The Examiner finds that Dahl discloses sending a signal and providing a visible display of the sent signal (FR3-4). The Examiner concludes (FR14; EA6):

> Since Froehling teaches the concept of sending a signal from a network control unit to a controller used to operate a HVAC and having a processing unit to verify the information sent, it would have been obvious to one skilled in the art to incorporate a display panel on each receiving unit, as disclosed by Dahl, with the HVAC unit, disclosed by Froehling, to allow the user to be notified that the signals being sent are being received.
>
> BOTH references are used to show that communication and verification of the data between two devices are performed. The Dahl reference is used merely to show that light emitting means is well known in the art and may be used to display that an acknowledgment has been made. It is not necessary that the references actually suggest, expressly or in so many words, the changes or improvements that the applicant has made.

Analysis

Appellants argue that there is no teaching or suggestion in Froehling as to transmission of a message that will initiate a visible display if the message is successfully processed by the HVAC device (Br7). It is argued that none of the examples of information gathered by the controller 10 (col. 24, line 54 to col. 25, line 11) appears to have come from or to be prompted by a communication from the head end unit 14 (Br7). Appellants argue that the statement in Froehling that the data processing units 16 are for "checking and verifying information passed between the controllers 10 and the headend unit 14" (col. 10, lines 50-52) "does not infer any particular checking and verifying of a message that would lead to initiating a visible display in the controllers 10" (Br8).

The Examiner admits that "Froehling does not specifically disclose the claimed network control device sending a message including information for prompting the HVAC device to initiate a visible display on the HVAC device if the message is successfully processed by the HVAC device" (FR3).

Thus, the Examiner does not dispute that Froehling discloses only a network control device connected to an HVAC device over a communication network and does not disclose or suggest any of the three steps of claim 1 or the structure in the body of claim 21.

Appellants argue that it would not have been obvious to modify the manner in which information is sent in Froehling so as to teach the claimed invention in view of Dahl (Br8). It is argued that Dahl teaches that request panel and acknowledge panel 90 simply alternate turns as to sending and receiving discrete messages such as "operator station needs parts" or "acknowledge unit has received parts message from operator station," whereas in Froehling, database information flows downwardly from the head end unit 14 without any acknowledgment from the controllers 10 back to the head end unit 14 and without any need to do such alternate sending and receiving (Br8). It is argued that the LED displays of Froehling provide for the display of the type of information contemplated by Froehling (Br8).

The Examiner's repeats the obviousness reasoning which we previously quoted (EA6).

"[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine the references." In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight." Id.

"[E]vidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved." Id. It is true that the motivation need not be found expressly in the references; however, if it is not in the references it must be found within one of the two other sources, either the knowledge of one of ordinary skill in the art or the nature of the problem.

We agree with Appellants that Froehling does not disclose or suggest the need for any visible display other than the LED display 59 of the operator panel 57, which permits the display and adjustment of selected system operating parameters (col. 11, lines 52-55). While Froehling mentions that data processing units 16 perform information checking and verification (col. 10, lines 51-52), there is no suggestion that there is a visible display if the message is successfully processed or even that units 16 are located where displays would be seen by an operator. Froehling does not disclose that units 16 or controllers 10 send an acknowledgment signal is response to successful processing of a message that could be provided with a visible indicator. Thus, the motivation to provide a visible display in response to a message from the head end unit is not found in Froehling.

Dahl discloses a manual signaling system between a plurality of operator stations 80, 81, having push buttons 82 and

corresponding indicator lamps 84, attached to a request panel 88, and an acknowledge panel 90, having push buttons 92 and corresponding acknowledge indicator lamps 94. When a push button 82 is depressed at an operator station 80, 81, to request service/material/parts for that station, the corresponding lamp 84 goes on and at the acknowledge panel 90 the corresponding indicator lamp 94 also goes on. The operator at the acknowledge panel arranges for the service/material/parts to be delivered to the requesting operator and then depresses the button 92 corresponding to the lamp 94 which is lit. When the corresponding acknowledge push button 92 is depressed, both the indicator lamp 94 at the acknowledge panel and the indicator lamp 84 at the operator station go off.

The purpose of Dahl is to provide a manually activated, visible means of communication between an operator at the operator station attached to a request panel and an operator at the acknowledge panel. The Examiner states that "The Dahl reference is used merely to show that light emitting means is well known in the art and may be used to display that an acknowledgment has been made" (FR14; EA6). However, since Froehling does not teach or suggest an acknowledgment signal or the need to produce a visible display of received messages at the HVAC device it appears that the only motivation for the modification is impermissibly based on Appellants' disclosure.

Dahl requires a visible display because it is communicating manual signaling between human operators and, thus, applying the display teachings of Dahl to the computer communication system of Froehling is problematic absent some teaching or suggestion that a visible display is necessary. The fact that Froehling could be modified to add a visual display does not make such a modification obvious absent some evidence of motivation to do so. We conclude that the Examiner has failed to establish a prima facie case of obviousness. Accordingly, the rejection of claims 1-10 and 21-30 is reversed.

REVERSED

LEE E. BARRETT Administrative Patent Judge	)	
LANCE LEONARD BARRY Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
HOWARD B. BLANKENSHIP Administrative Patent Judge	)	

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